

Claim amendments

1. (currently amended) A method for modification of a speech signal indicative of a stream of speech data having a plurality of syllables, comprising ~~the steps of~~:

mapping the stream of speech data from the speech signal into a stream of tone data according to a predetermined rule regarding the syllables for providing a tone signal indicative of the stream of tone data, wherein the predetermined rule is based on at least one linguistic characteristic of the syllables;

forming a string of musical notes responsive to the tone signal for providing a carrier signal indicative of the string of musical notes, such that said at least one linguistic characteristic is associated with a musical note;

modulating the carrier signal with the speech signal for providing a modified signal; and

providing an audible signal representative of the speech signal, according to the modified signal, musically modified according to the predetermined rule.

2. (original) The method of claim 1, wherein the predetermined rule includes an assignment of at least a tone to a syllable of the speech data, based on a vowel of the syllable.

3. (original) The method of claim 1, wherein the predetermined rule includes an assignment of at least a tone to a syllable of the speech data, based on a consonant of the syllable.

4. (original) The method of claim 1, wherein the predetermined rule includes an assignment of at least a tone to a syllable of the speech data, based on an intonation of the syllable.

5. (original) The method of claim 1, wherein the predetermined rule includes an assignment of at least a tone to a syllable of the speech data, based on a combination of a vowel and a consonant of the syllable.

6. (original) The method of claim 1, wherein the predetermined rule includes an assignment of tempo to the musical notes.

7. (original) The method of claim 1, wherein the predetermined rule includes an assignment of a tone color to the carrier signal indicative of a musical instrument.
8. (original) The method of claim 1, wherein the predetermined rule includes a linguistic rule based on language of the speech data.
9. (original) The method of claim 1, wherein the speech signal is provided in response to an incoming telephone call on a telephone, and the audible signal is indicative of the incoming telephone call.
10. (original) The method of claim 1, wherein the speech signal is provided in response to a message on a telephone or a communicator, and the audible signal is indicative of the message.
11. (original) The method of claim 1, wherein the speech signal is provided in response to a scheduled event in a personal digital assistance device, and the audible signal is indicative of the scheduled event.
12. (original) The method of claim 1, wherein the speech signal is provided in response to a search in phone book contents by a user, and the audible signal is indicative of the search being accomplished.
13. (original) The method of claim 1, wherein the speech signal is provided in response to a user-interface event in an electronic device, and the audible signal is indicative of the user-interface event.
14. (original) The method of claim 1, wherein the speech signal is provided in response to a user-interface event in an electronic device, wherein the user-interface event is arranged according to a hierarchy of positions in the electronic device, and the predetermined rule musically modifies the speech signal according to the position of the user-interface event in the hierarchy.

15. (original) The method of claim 14, wherein the predetermined rule includes an assignment of a tone color to the carrier signal based on the position of the user-interface event in the hierarchy.

16. (original) The method of claim 14, wherein the predetermined rule includes an assignment of a pitch range to the carrier signal based on the position of the user-interface event in the hierarchy.

17. (currently amended) An apparatus for modification of a speech signal indicative of a stream of speech data having a plurality of syllables, comprising:

    a mapping mechanism, responsive to the speech signal, for mapping the syllables into a stream of tone data based on a predetermined rule regarding the syllables, and for providing a tone signal indicative of the stream of tone data, wherein the predetermined rule is based on at least one linguistic characteristic of the syllables;

    a forming mechanism, responsive to the tone signal, for providing a string of musical notes based on the stream of tone data, and for providing a carrier signal indicative of the string of musical notes, such that said at least one linguistic characteristic is associated with a musical note;

    a modulation mechanism, responsive to the carrier signal, for modulating the carrier signal with the speech signal, and for providing a modified speech signal indicative of the modulation; and

    a sound production device, responsive to the modified speech signal, for providing an audible signal representative of the speech signal, musically modified according to the predetermined rule.

18.(original) The apparatus of claim 17, wherein the predetermined rule includes a linguistic rule based on language of the speech data.

19. (currently amended) The apparatus of claim 17, wherein the speech data is indicative of a user-interface event.

20. (currently amended) An electronic device, comprising:

a generating mechanism, responsive to a user-interface event, for providing a speech signal indicative of the user-interface event, wherein the speech signal includes a stream of speech data having a plurality of syllables;

a mapping mechanism, responsive to the speech signal, for mapping the syllables into a stream of tone data based on a predetermined rule regarding the syllables, and for providing a tone signal indicative of the stream of tone data, wherein the predetermined rule is based on at least one linguistic characteristic of the syllable;

a forming mechanism, responsive to the tone signal, for providing a string of musical notes based on the stream of tone data, and for providing a carrier signal indicative of the string of musical notes, such that said at least one linguistic characteristic is associated with a musical note;

a modulation mechanism, responsive to the carrier signal, for modulating the carrier signal with the speech signal, and for providing a modified speech signal indicative of the modulation; and

a sound production device, responsive to the modified speech signal, for providing an audible signal representative of the speech signal, musically modified according to the predetermined rule.

21. (original) The electronic device of claim 20, wherein the user-interface event includes an incoming telephone call using the electronic device.

22. (original) The electronic device of claim 20, wherein the user-interface event includes an incoming telephone call using the electronic device, and the audible signal is indicative of the telephone call.

23. (original) The electronic device of claim 20, wherein the user-interface event includes a message received by the electronic device, and the audible signal is indicative of the reception of the message.

24. (original) The electronic device of claim 20, wherein the user-interface event includes a

message received by the electronic device, and the audible signal is indicative of deletion of the message.

25. (original) The electronic device of claim 20, wherein the user-interface event includes a scheduled event in a calendar, and the audible signal is indicative of the scheduled event.

26. (original) The electronic device of claim 20, wherein the user-interface event includes a scheduled event in a calendar, and the audible signal is indicative of entry of the scheduled event in the calendar.

27. (original) The electronic device of claim 20, wherein the user-interface event includes a scheduled event in a calendar, and the audible signal is indicative of deletion of the scheduled event from the calendar.